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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,464	06/26/2003	Phillip Lu	MS1-1545US	3499

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EXAMINER	
PENDLETON, BRIAN T	

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/606,464	LU ET AL.	
	Examiner	Art Unit	
	Brian T. Pendleton	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 June 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) *20-43* is/are withdrawn from consideration.

5)☒ Claim(s) *8-13* is/are allowed.

6)☒ Claim(s) *14 and 16-19* is/are rejected.

7)☒ Claim(s) *15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 June 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

This application contains claims directed to the following patentably distinct species: Species I – claims 1-19, Species II – claims 20-26, Species III – claims 27-31, Species IV – claims 32-36 and 41-43, Species V – claims 37-40. The species are independent or distinct because they accomplish volume normalization using different methods and under different conditions.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic claim.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

During a telephone conversation with Mr. Allen Sponseller on October 31, 2006 a provisional election was made without traverse to prosecute the invention of Species I, claims 1-19. Affirmation of this election must be made by applicant in replying to this Office action.

Claims 20-43 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Zeevi et al, US Patent Application Publication 2004/0005068. Zeevi discloses a volume normalization method in figures 2 and 3 which receives an audio track (see paragraph 104), determines if the energy level E_A of the track is stored in memory "media library" 24 (paragraph 106, step 36) and uses the energy level to calculate an amplification factor of the track, and if the energy level of the track is not in memory retrieves the energy level of the audio track (step 40), and applies the amplification factor to the track (step 42) wherein the energy level E_A is the volume normalization parameter. Claims 1, 6, and 7 are rejected. Regarding claim 2, paragraphs 6 and

7 teach that the audio tracks are to be played at a pre-set volume level. As to claim 5, the method calculates the average volume level of the audio tracks. Regarding claim 3, the mapping function is the ratio of the energy level E_A of the track to the user-desired energy level E_L.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4, 14, and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zeevi in view of Cliff, US Patent 6,534,700. Zeevi does not disclose that the volume normalization parameter is a peak volume level associated with the audio file. Cliff discloses a method of mixing music (a plurality of channels) whereby peak detectors 120, 122, 124 are used to keep the output volume of the mixed music constant. Thus, Cliff discloses a volume normalization parameter associated with a peak volume level. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Zeevi to use peak volume level, as taught by Cliff, in lieu of average energy for the purpose of preventing over-amplification of the output signal and using an known alternative parameter for volume control. Regarding claims 14 and 16-19, the combination of Zeevi and Cliff discloses receiving an audio file and identifying a mapping function with the audio file (step 36), applying the mapping function to the audio file (step 44), whereby in light of the teachings of Cliff, the mapping function has a second portion above a predetermined threshold (where the amplitude of the signal is reduced).

Allowable Subject Matter

Claims 8-13 are allowed.

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art references of record, including Kincaid, US Patent 7,072,477 do not disclose nor suggest determining whether volume normalization parameters associated with the audio file are stored in a media library or stored in the audio file, if not stored in the media library. Zeevi discloses storing and checking for the volume normalization (amplification factor) in a media library, while Kincaid teaches storing and checking the audio file for a scaled normalization gain factor. However, there is no teaching nor suggestion in the references of combining the methodologies, specifically determining whether the parameters are stored in an audio file after first determining whether the parameters are stored in a media library, as required by independent claim 8. Therefore, claim 8 and its dependents are allowed. Regarding claim 15, the prior art of record teach a mapping function which is linear. There is no disclosure nor suggestion in Zeevi and Kincaid of a mapping function having two portions, one quadratic and the other linear.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian T. Pendleton
Primary Examiner
Art Unit 2615

btp